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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |  |
|---|-------------|----------------------|---------------------|-----------------|--|
| 10/506,929  | 12/09/2004  | Keith Allan Bechtum  | 00758.1298USWO      | 6542            |  |
| 23552 7590 06/27/2007<br>MERCHANT & GOULD PC<br>P.O. BOX 2903 |             |                      | , EXAN              | ' EXAMINER      |  |
|   |             | *                    | CECIL, TERRY K      |                 |  |
| MINNEAPOLIS, MN 55402-0903                                    | ART UNIT    |                      | PAPER NUMBER        |                 |  |
|   | •           |                      | 1723                |                 |  |
|   |             |                      | •                   | •               |  |
|   | •           | •                    | MAIL DATE           | DELIVERY MODE   |  |
|   |             |                      | 06/27/2007          | PAPER           |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.   | Applicant(s)   |  |  |  |  |
|--|---|--|--|--|--|--|
|  | 10/506,929  | BECHTUM ET AL.   |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |  |  |  |  |
|  | Mr. Terry K. Cecil  | 1723   |  |  |  |  |
| The MAILING DATE of this communication ap  |   | correspondence address   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailling date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailir earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be oly within the statutory minimum of thirty (30) d will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDON | timely filed  ays will be considered timely.  In the mailing date of this communication.  NED (35 U.S.C. § 133). |  |  |  |  |
| Status   |   | •  |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on <u>07 /</u>  | March 2005.   |  |  |  |  |  |
|  | ·   |  |  |  |  |  |
| 3) Since this application is in condition for allowa   | , <del> _</del>   |  |  |  |  |  |
| closed in accordance with the practice under   | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |  |
| )⊠ Claim(s) <u>14-26</u> is/are pending in the application.  |   |  |  |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  | •   |  |  |  |  |  |
| 6)⊠ Claim(s) <u>14-26</u> is/are rejected.   |   |  |  |  |  |  |
| 7) Claim(s) is/are objected to.  | · · · — ·   |  |  |  |  |  |
|  | Claim(s) are subject to restriction and/or election requirement.  |  |  |  |  |  |
| Application Papers   |   |  |  |  |  |  |
| 9) The specification is objected to by the Examine   | er.   |  |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>9-7-2008</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.  |   |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |  |  |  |  |  |
| 11) The oath or declaration is objected to by the E  |   |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign  | n priority under 35 H.S.C. & 119/   | a)-(d) or (f)  |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:   |   |  |  |  |  |  |
| 1. Certified copies of the priority documen  | ts have been received   |  |  |  |  |  |
| Certified copies of the priority documen   |   | ation No   |  |  |  |  |
| 3. Copies of the certified copies of the prior   | • •   |  |  |  |  |  |
| application from the International Burea   | ·   | vod III dillo i vadional olago   |  |  |  |  |
| * See the attached detailed Office action for a list   |   | ved.   |  |  |  |  |
| •  |   | •  |  |  |  |  |
| Attachment(s)  |   |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  |   |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date  |   |  |  |  |  |  |
| <ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date <u>one</u>.</li> </ol>   | 6) Other:   | ratent Application (FTO-132)   |  |  |  |  |

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#### **DETAILED ACTION**

## Claim Objections

- 1. Claim 17 is objected to because of the following:
- Since the terms "first, open end piece" and "second closed end piece" were included in claim 14, "a" before the terms should be changed to "the" or "said".

Appropriate correction is required.

## Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 3. Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim is indefinite because of the following reason:
- Claims 26 recites "A method...as in claim 24", however, claim 24 is an apparatus claim. Did applicant intend for claim 26 to depend from claim 25 instead?

### Claim Rejections - 35 USC § 103

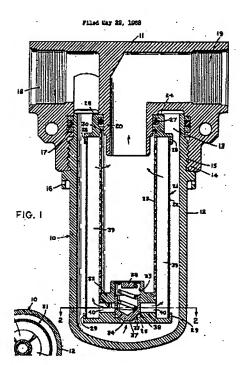
- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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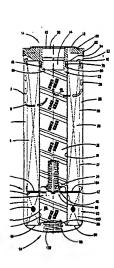
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The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. Claims 14-19 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scavuzzo (U.S. 3,000,505) in view of Theisen et al. (U.S. 5,885,447).



As shown, Scavuzzo teaches a liquid filter apparatus including a configuration wherein flow in normal operation is serial through primary and secondary filters. A bypass valve is located at a bottom thereof and allow liquid to bypass the primary filter. Scavuzzo teaches the primary filter to be pleated (col. 2, line 34) and the second filter to be a porous wire screen (col. 2, line 35) [as in claims 14-15 and 25-26]. However, Scavuzzo doesn't teach each of the filters to include a porous support.



Theisen teaches a primary pleated filter 36 including an inner support 38 and a second screening filter including an inner support 106 [as in claims 14 and 25]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the inner supports of Theisen in the filters of Scavuzzo, respectively,

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since such would allow the filter walls to stand up to greater differential pressures without collapsing and compromising the filtering action.

As for claims 14 and 25, it is believed that the gap between the filters would be greater than 5mm to accommodate the normal volumetric flow rates in the lubrication environments taught by Scavuzzo. However, such sizing is considered to be within ordinary skill, see *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976).

As for claim 16, the interlocking spiral configuration of the support is taught by Theisen as shown in his drawings.

As for claim 17, the ends of the secondary filter are secured are secured to open and closed end pieces respectively.

As for claim 18, the pleated media of the primary filter is non-releaseably secured to the open and closed end pieces. As for claim 19, the top plate including flange 28 and portion 24 integrally-formed with the open end piece functions to retain the filters and the bypass valve within the housing. Seal 26 allows the filtering unit to be replaced as desired.

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scavuzzo, as modified above and in further view of Crawford (U.S. 3,502,116). Crawford teaches a filter cloth having wire diameters less than .030 inches. It is considered that it would have been

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obvious to one ordinarily skilled in the art at the time of the invention to have the wire size of Crawford in the invention of the modified Scavuzzo, since Crawford teaches the benefit of greater strength (col. 1).

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- 7. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scavuzzo, as modified above and in further view of Kingsbury et al. (U.S. 3,231,091). Kingsbury teaches a wire filter in a Plain Dutch weave and having a wire density as claimed, e.g. 30 x 150 (col. 4, line 45). It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to having the wire filter of Kingsbury in the secondary filter of the modified Scavuzzo, since Kingsbury teaches the benefits of low pressure drop and readily cleanable (col. 1).
- 8. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scavuzzo, as modified above and in further view of Booth (U.S. 4,207,187). Booth teaches a configuration wherein the primary filter can be separated from the secondary filter (notice the area of seal 47). It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the releasable arrangement of Booth in the invention of the modified Scavuzzo, since such would provide the benefit of replacing only one of the filters instead of both when only the primary filter needs replacing.

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### 9. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (571) 272-1138 at the Carlisle campus in Alexandria, Virginia for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:30a to 4:30p, on at least four days during the week M-F.
- David R. Sample, the examiner's supervisor can be reached on 571-272-1376, if attempts to reach the examiner are unsuccessful.
- The Fax number for this art unit for official faxes is (571) 273-8300.
- Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9167 (toll-free).

Primary Examiner

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TKC June 22, 2007